

IC Symposium Describing the Environment

**U.S. Army Computer Network Operations –
Electronic Warfare Proponent (USACEWP)
COL Wayne Parks, Director**

The overall classification of this brief is: **UNCLASSIFIED**



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Joint Operating Environment

- Human Geography
- Governance and Legitimacy
- Resources and Economics
- Science, Technology, and Engineering
 - By 2020-2030 machine intelligence and capabilities could surpass human capabilities.
 - Communications links, enabled by wireless and broadband technology and connected through vast and complex networks, will continue to grow.
 - The information, knowledge, and communications revolution will continue to accelerate.
 - Individuals and small groups having the ability to become “super-empowered”
 - Broadly speaking, in the 2030-plus timeframe, humans will be inextricably linked and in some cases it will be impossible to differentiate between man and machine.

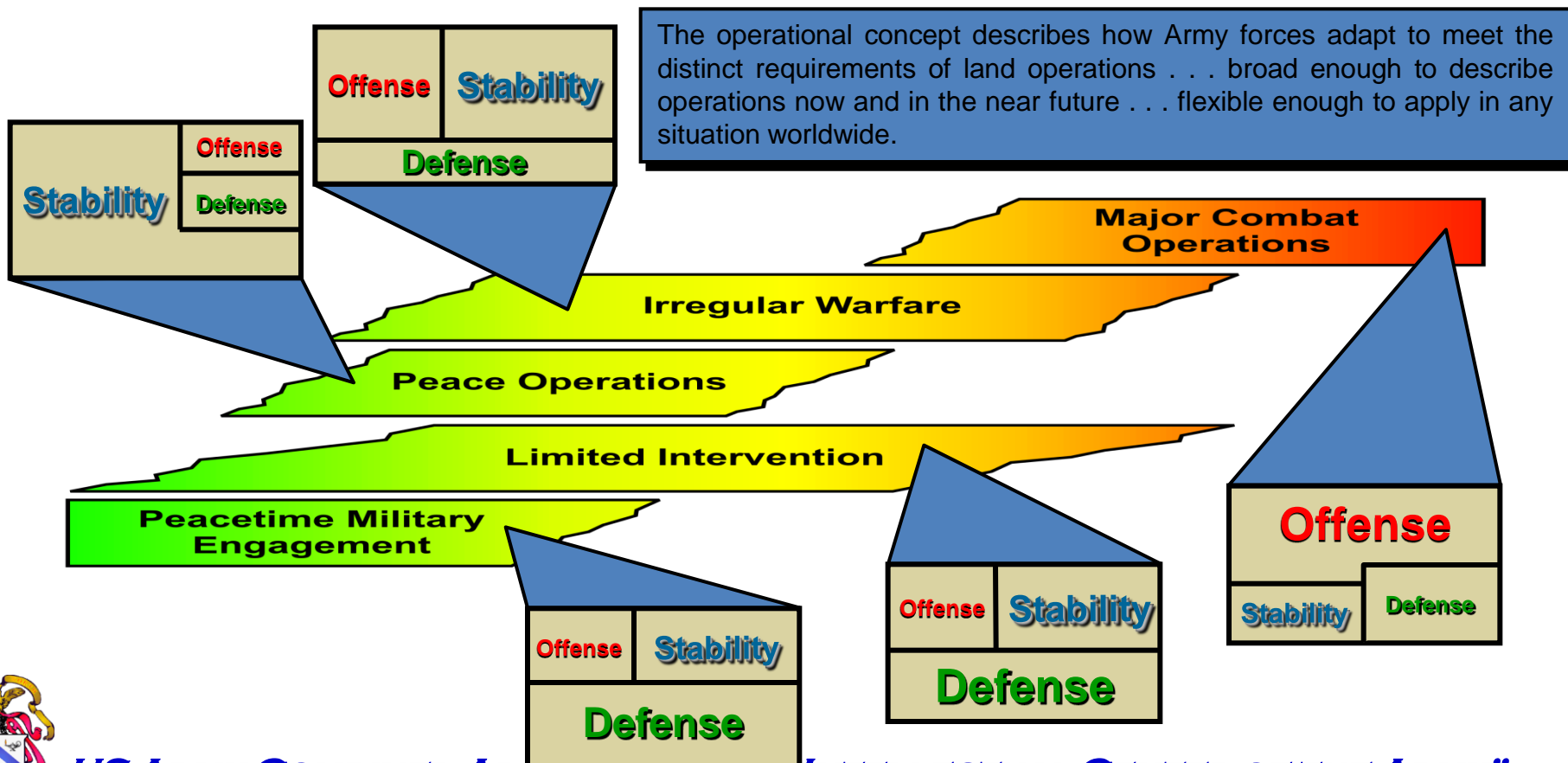
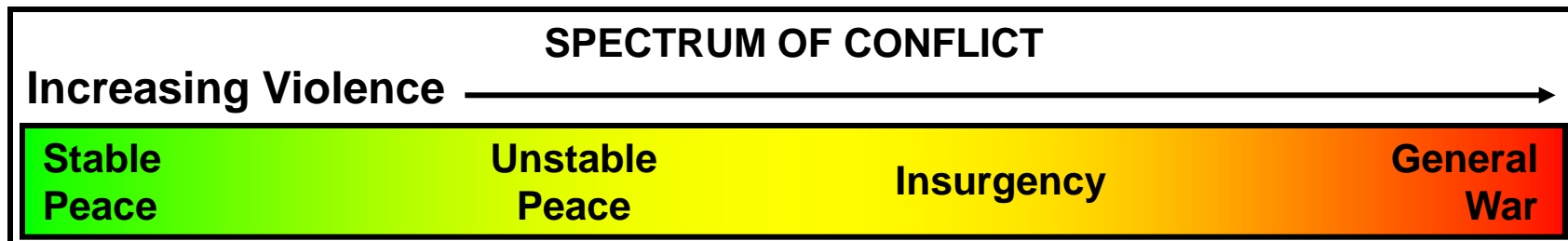


The Operational Environment for the Conduct of Land Operations

- Several attributes of the land environment affect the application of landpower. These include:
 - The requirement to deploy and employ Army forces rapidly
 - The requirement for Army forces to operate for protracted periods
 - The nature of close combat
 - Uncertainty, chance, friction, and complexity
- **The Operational Concept and a unified action environment**
 - Prevail in any conflict as part of a joint, interagency, intergovernmental, and multinational (JIIM) team by capitalizing on a traditional American Army strength – adaptive and creative small unit leadership.
 - Provides a broad guideline for the employment of Army forces in an increasingly complex and uncertain environment
- Technology will be another double-edged sword
 - Innovations that improve the quality of life and livelihood are also used by adversaries to destroy those lives
 - Proliferation, falling costs, and availability of technologically advanced products—
 - Expanded information technologies using mobile networks and expanded use of wireless and global fiber-optic networks
 - Enabled nonstate adversaries to acquire them
- The operational environment will expand to areas historically immune to battle, including:
 - The continental United States and the territory of multinational partners, especially urban areas
 - Probably include areas not defined by geography, such as cyberspace
 - Computer network attacks that will span borders and will be able to hit anywhere, anytime
 - With the exception of cyberspace, all operations will be conducted “among the people” and outcomes will be measured in terms of effects on populations.



Full Spectrum Operations

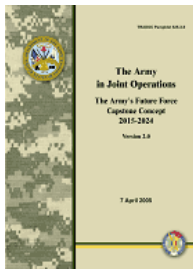


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Synchronizing Concepts & Capabilities

Army Family of Concepts

Capstone Concept



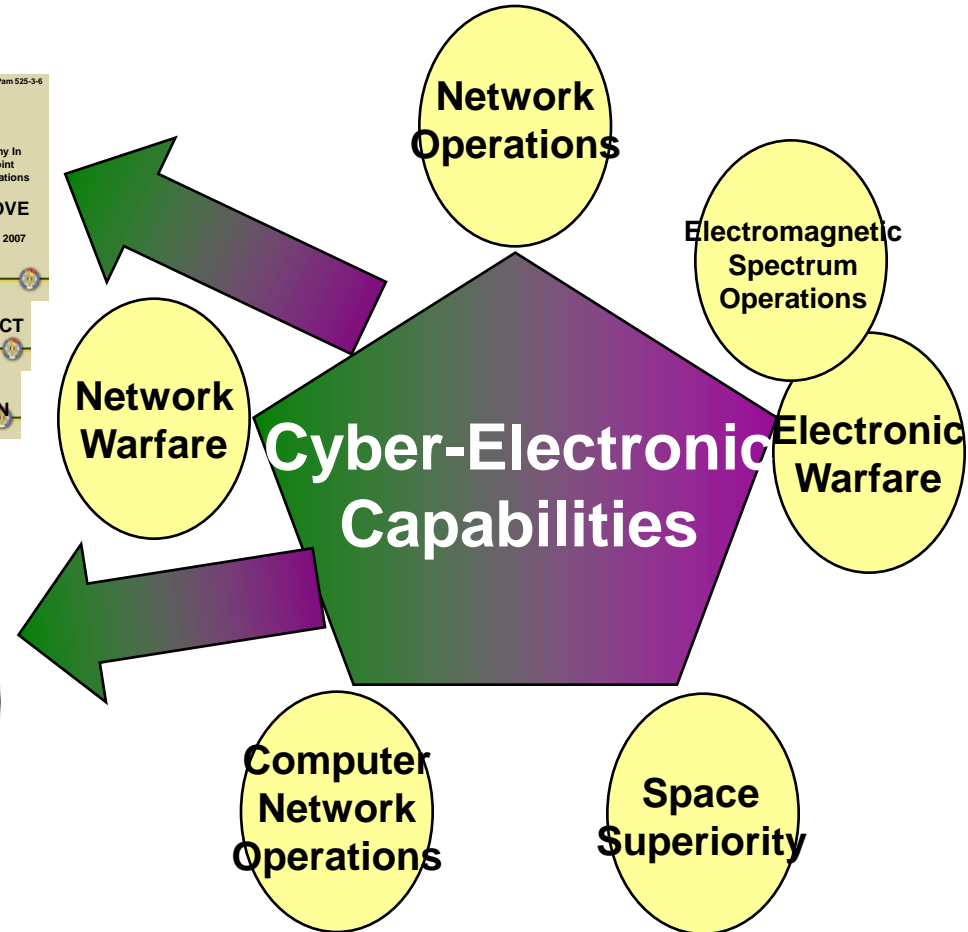
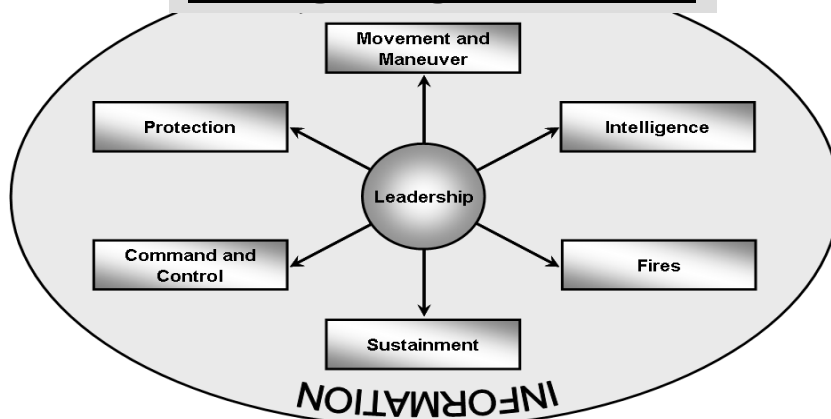
Operating Concepts



Functional Concepts



Warfighting Functions



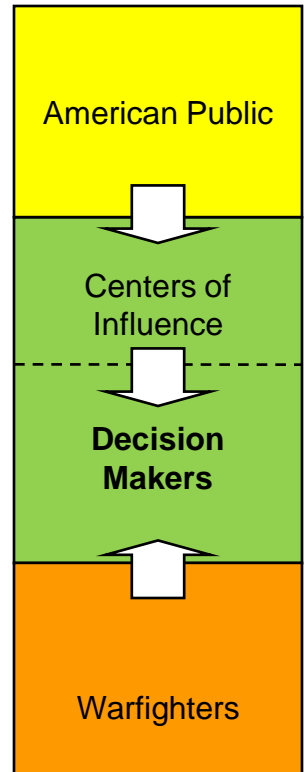
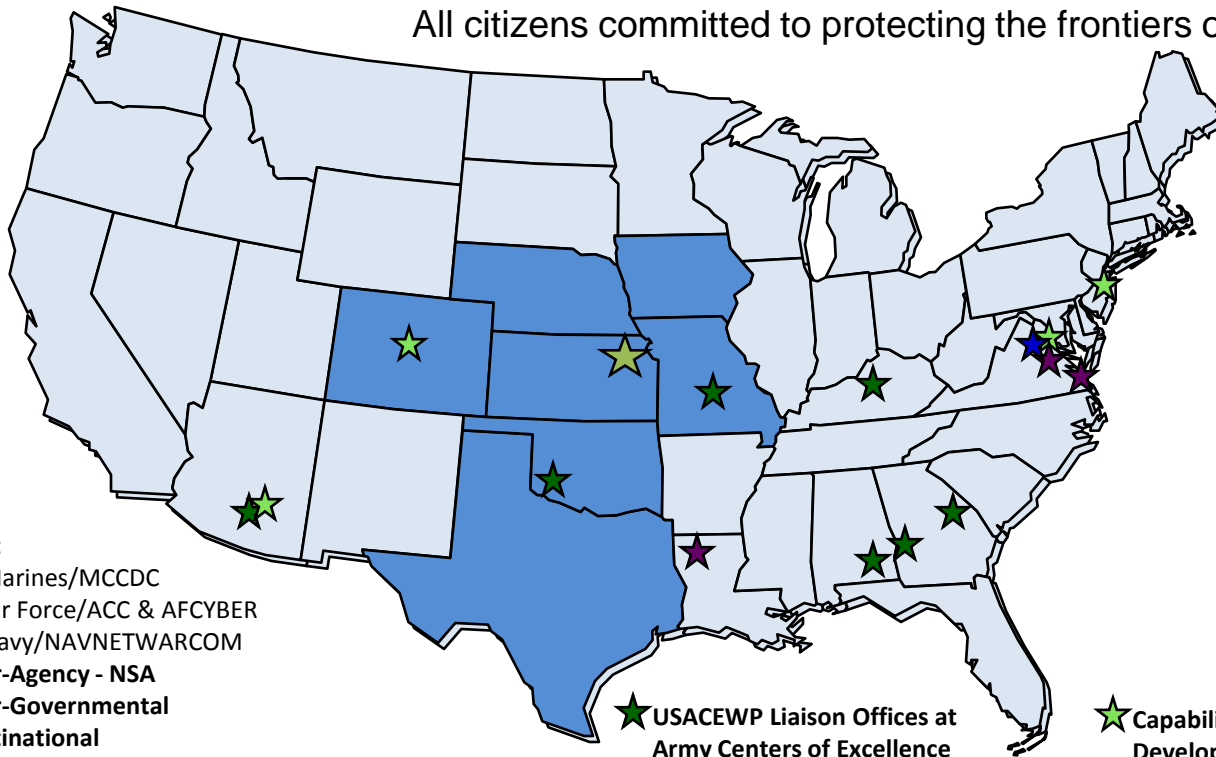
Integrated joint capability for the Commander's combined arms approach to full spectrum operations



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USACEWP Partners & Constituencies

All citizens committed to protecting the frontiers of freedom



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